01-26-19	<b>GGG</b> FLH Ref. No.: 450100-46
mac 1 24.99	ET U.S. DEPARIMENT OF COMMERC Patent and Trademark Offic
To the Honorable Commissioner of Pa 1009503	350 ttached original documents or copy thereof.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Toshiya AKIBA, Takao TAKAHASHI, Masashi OHTA, Toshimich HAMADA, Taro SUITO, Masami TOMITA, Katsunari MIYATA, Koichi CHOTOKU	Name: SONY CORPORATION 7-35 Kitashinagawa 6-chome Shinagawa-Ku, Tokyo 100-31, Japan
Additional name(s) of conveying party(ies) attached? YesNo	Additional name(s) & address(es) attached? Yes <u>x</u> No
<ol> <li>Nature of conveyance:</li> <li><u>X</u> Assignment</li> </ol>	
Security Agreement Merger Change of Name Other	
Execut on Date(s): <u>December 25, 1998, December 25, 1998,</u> January 6, January 6, January 6, January 6, January 6, and January 6, 1999	
4. Application number(s) or patent number(s):	
If this document is being filed togethe with the application is:	h a new application, the execution date of
A. Patent Application No.(s) <u>09/163,222</u> filed <u>Septemb</u>	er 29, 1998
Additional numbers atta	ached? Yes _X No
<ol> <li>Name and address of party to whom correspondence concerning document should be mailed:</li> </ol>	6. Total number of applications and patents involved
Name: WILLIAM S. FROMMER	7. Total fee (37 CFR 3.41)
Internal Address: FROMMER LAWRENCE & HAUG LLP	<u>X</u> Enclosed <u>Authorized to be charged to</u> <u>Enclosed</u>
Street Address: 745 FIFTH AVENUE C:ty: <u>NEW YORK</u> State: <u>N.Y.</u> Zip: <u>10151</u>	deposit account 50-0320           8. Deposit account number:           (Attach duplicate copy of this page if paying by deposit account)
Do no: use	e this space
9. <u>Statement and signature</u> . To the best of my knowledge and belief, the foregoing inforcopy of the original document. <b>CORLOW F3S(ER</b> <b>WILLIAM S. FROMMER</b>	January 14, 1999
Name of Person Signing	ature Date Total number of pages including cover sheet, attachments, and document: 3
	h this portion required cover sheet information to:
22/1999 DNGUYEN 00000239 09163222 Commissioner of Pat Box Ass	tents and Trademarks signments . D.C. 20231
Public burden reporting for this sample cover sheet is est mate including time for reviewing the document and gathering the dat Send comments regarding this burden estimate to the U.S. Patent PK2-1000C, Washington, D.C. 20231, and to the Office of Manager Washington, D.C. 20503.	ta needed, and completing and reviewing the sample cover sneet. t and Trademark Office, Office of Information Systems,

## PATENT REEL: 9709 FRAME: 0959

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FLH File No. 450100-6617

/ SSIGNMENT

WHEREAS, I, as below named inventors, residing at the addresses stated next to our names, and a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in

SIGNAL RECORDING AND/OR REPRODUCTION APPARATUS AND METHOD, SIGNAL RECORDING APPARATUS AND METHOD. AND SIGNAL REPRODUCTION APPARATUS AND METHOD

for which application for Letters Patent of the United States of America was executed by me on the date ind cated next to my name and address;

AND WHEREAS, SONY CORPORATION, a Japanese corporation, with offices at 7-35 Kitashinagawa &-Chome, Shinagawa-Ku, Tokyo 141, Japan (hereinafter referred to as ASSIGNEE) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are nereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industria. Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing on to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEE, as the assignee of the whole right tottle and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and letters Patent of the United States and Countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign count ies as may be known and accessible to me and will testify as to the same in any interference or litigation related thereio;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

And I hereby authorize and request my a torney(s) of record in this application to insert the serial number and filing date of this application in the spaces that follow: Serial Number: <u>09/163,222</u> Filing Date: <u>September 29, 1998</u>.

This assignment executed on the dates indicated below.

Toshi/a AkiBA

Name of first or sole inventor

Execution date of U.S. Patent Application

Kanagawa, Japan

Takao TAKAHASHI

Residence of first or sole inventor, an ba - i - acture S gnature of first or sole inventor

Date of this assignment

Pecenter 199

Execution date of U.S. Patent App

Execution date of U.S. Patent App ication

Tokyo Japan

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Name of second inventor

Masashi OHTA

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Residence of third inventor Martashi

Signature of third inventor

Date of this assignment

Date of this assignment

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**S98F1059US)**0 F\_H File No 450100-4617

Toshimichi HAMADA	6 January 119
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RECORDED: 01/21/1999